JKLM ENERGY LLC

NO AFS#
Natalia Vasquez
NSPS 0000a

October 25, 2018

Via Certified Mail: 7016 0750 0000 1918 4607

Director, Air Protection Division EPA Region III
Mail Code 3AP00
1650 Arch Street
Philadelphia, PA 19103-2029

OCT 30 2018

Subject: **JKLM Energy, LLC**
Headwaters Well Site 143
Initial NSPS Subpart OOOOa Annual Report

Dear Director,

JKLM Energy, LLC (JKLM) is submitting the Initial NSPS Subpart OOOOa Annual Report for Headwaters 143 well site in Ulysses Township, Potter County, Pennsylvania, in accordance with 40 Code of Federal Regulations (CFR) §60.5420a(b). The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to 40 CFR §60.5410a. The initial startup for Headwaters 143 was August 1, 2017; therefore, the initial compliance period was from August 1, 2017, through August 1, 2018. This initial report is being submitted by October 30, 2018, which is 90 days after the end of the initial compliance period. Subsequent annual reports will be due no later than the same date each year as the initial annual report.

This Initial Annual Report includes applicable information of the items required under 40 CFR § 60.5420a(b).

- General Information
- Well Information
- Centrifugal Compressor Information
- Reciprocating Compressor Information
- Pneumatic Controller Information
- Storage Vessel Information
- Fugitive Emissions Components Information

2200 Georgetowne Drive | Suite 500 Sewickley, PA 15143

P 724-935-2426

JKLM ENERGY LLC

- Pneumatic Pump Information
- Performance Test Information
- Combustion Control Device Information
- Closed Vent System Certification

If you have any questions or concerns, please contact me at 724-935-9815 or jharrick@emslp.com or Leah Blinn at 412-249-1607 or lblinn@cecinc.com, and we will provide any clarification or additional information.

Sincerely,

Joseph M. Harrick
General Manager of Environmental, Health & Safety
JKLM Energy, LLC

Cc: Commonwealth of Pennsylvania, Department of Environmental Protection

Enclosures

2200 Georgetowne Drive | Suite 500 Sewickley, PA 15143

P 724-935-2426

JKLM ENERGY LLC

Headwaters 143
Potter County, Pennsylvania

Initial NSPS Subpart OOOOa Annual Report

Submitted by
JKLM Energy, LLC
2200 Georgetowne Drive, Suite 500
Sewickley, PA 15143

October 2018

Table of Contents

List of Attachments

1. General Information

[40 CFR 60.5420a(b)(1)]

Requirement	Response
Company Name [(b)(1)(i)]	JKLM Energy, LLC
Facility Site Name [(b)(1)(i)]	Headwaters 143
US Well ID [(b)(1)(i)]	37-105-21860-00-00 37-105-21861-00-00
Location [(b)(1)(i)] • Address	See Site Location Description and Latitude/Longitude Coordinates below.
If address not available:	
• Site Location Description	Facility is located at the end of T455, which is about 2 miles northeast of the intersection of State Route 1001 with North Brookland Road (Highway 449) in Ulysses Township in Potter County.
• Lat/Long Coordinates (NAD 1983)	41.842470, -77.740307
Identification of each affected facility included in report [(b)(1)(ii)]	Well: Headwaters 143-4HU; Well: Headwaters 143-5HU; and Fugitive Components at the Well Site
Reporting Period [(b)(1)(iii)] • Beginning Date • End Date	 August 1, 2017 August 1, 2018
Certification Statement [(b)(1)(iv)]	See **Attachment 1**

2.1 Well Information – Headwaters 143-4HU

[40 CFR 60.5420a(b)(2)]

Requirement	Response
• Records identifying each well completion operation for each well affected facility. [(b)(2)(i)]	See **Attachment 2**
• Records of deviations in cases where well completion operations with hydraulic fracturing were not performed in compliance with the requirements specified in §60.5375a. [(b)(2)(i) and (ii)]	Not Applicable. There were no deviations associated with well completion utilizing hydraulic fracturing from the standards of 60.5375a during the Reporting Period.
• Log of each well completion operation. [(b)(2)(i)]	See **Attachment 3**
• Records if claiming Exception under 60.5375a(a)(3) – unable to route to a completion combustion device. [(b)(2)(i)]	See **Attachment 3**
or	
• If using Digital Photograph in lieu of the records required in 60.5420a(c)(1)(i)-(iv), retain records specified in 60.5410a(a)(4) [(b)(2)(i)]	Not Applicable
• Records if the Well is not subject to the Well Completion Standards according to 60.5375a(g) – Facility with less than 300 scf of gas per stock tank barrel of oil produced. [(b)(2)(i)]	Not Applicable

2.1 Well Information – Headwaters 143-4HU

[40 CFR 60.5420a(b)(2)]

Requirement	Response
• Records that support a low pressure well determination including supporting inputs and calculations. [(b)(2)(iii)	Not Applicable

2.2 Well Information – Headwaters 143-5HU

[40 CFR 60.5420a(b)(2)]

Requirement	Response
• Records identifying each well completion operation for each well affected facility. [(b)(2)(i)]	See **Attachment 2**
• Records of deviations in cases where well completion operations with hydraulic fracturing were not performed in compliance with the requirements specified in §60.5375a. [(b)(2)(i) and (ii)]	Not Applicable. There were no deviations associated with well completion utilizing hydraulic fracturing from the standards of 60.5375a during the Reporting Period.
• Log of each well completion operation. [(b)(2)(i)]	See **Attachment 3**
• Records if claiming Exception under 60.5375a(a)(3) – unable to route to a completion combustion device. [(b)(2)(i)]	See **Attachment 3**
or	
• If using Digital Photograph in lieu of the records required in 60.5420a(c)(1)(i)-(iv), retain records specified in 60.5410a(a)(4) [(b)(2)(i)]	Not Applicable
• Records if the Well is not subject to the Well Completion Standards according to 60.5375a(g) – Facility with less than 300 scf of gas per stock tank barrel of oil produced. [(b)(2)(i)]	Not Applicable
• Records that support a low pressure well determination including supporting inputs and calculations. [(b)(2)(iii)	Not Applicable

3. Centrifugal Compressor

[40 CFR 60.5420a(b)(3)]

Requirement	Response
	Not Applicable. No centrifugal compressors are located at this site.

4. Reciprocating Compressor

[40 CFR 60.5420a(b)(4)]

Requirement	Response
	Not Applicable. No reciprocating compressors are located at this site.

5. Pneumatic Controller

[40 CFR 60.5420a(b)(5)]

Requirement	Response
	Not Applicable. No applicable pneumatic controllers are located at this site.

6. Storage Vessel

[40 CFR 60.5420a(b)(6)]

Requirement	Response
	Not Applicable. No applicable storage vessels are located at this site.

7.1 Fugitive Emissions Components – Survey 1

[40 CFR 60.5420a(b)(7)]

Requirement	Response
• Date of Survey [(b)(7)(i)]	October 10, 2017
• Time of Survey [(b)(7)(ii)] ○ Start Time ○ End Time	 5:25 pm 6:10 pm
• Name of operator(s) performing survey. If using OGI, note the training and experience of the operator. [(b)(7)(iii)]	Ryan J. Flanagan. Certified OGI Thermographer through June 15, 2022, by Infrared Training Center with four years of LDAR experience.
• Ambient temperature, sky conditions, and maximum wind speed [(b)(7)(iv)]	69.1°F; overcast skies; 3.5 mph winds
• Monitoring instrument [(b)(7)(v)]	FLIR Infrared Camera Model GF320
• Any deviations from the monitoring plan [(b)(7)(vi)]	No
• Number and type of components where fugitive emissions were detected [(b)(7)(vii)]	(1) One Connector at Pressure Gauge
• Number and type of components that were not repaired [(b)(7)(viii)]	(0) Zero
• Number and type of difficult-to-monitor and unsafe-to-monitor components monitored [(b)(7)(ix)]	Not Applicable
• Date of successful repair of components [(b)(7)(x)]	October 10, 2017
• Number and type of components placed on delay of repair and explanation for delay [(b)(7)(xi)]	(0) Zero
• Type of instrument used to resurvey repaired components that could not be repaired during initial finding [(b)(7)(xii)]	Not Applicable

7.2 Fugitive Emissions Components – Survey 2

[40 CFR 60.5420a(b)(7)]

Requirement	Response
• Date of Survey [(b)(7)(i)]	March 28, 2018
• Time of Survey [(b)(7)(ii)] ○ Start Time ○ End Time	 12:10 pm 12:53 pm
• Name of operator(s) performing survey. If using OGI, note the training and experience of the operator. [(b)(7)(iii)]	Ryan J. Flanagan. Certified OGI Thermographer through June 15, 2022, by Infrared Training Center with five years of LDAR experience.
• Ambient temperature, sky conditions, and maximum wind speed [(b)(7)(iv)]	45°F; overcast skies; 1.7 mph winds
• Monitoring instrument [(b)(7)(v)]	FLIR Infrared Camera Model GF320
• Any deviations from the monitoring plan [(b)(7)(vi)]	No
• Number and type of components where fugitive emissions were detected [(b)(7)(vii)]	(0) Zero
• Number and type of components that were not repaired [(b)(7)(viii)]	Not Applicable
• Number and type of difficult-to-monitor and unsafe-to-monitor components monitored [(b)(7)(ix)]	Not Applicable
• Date of successful repair of components [(b)(7)(x)]	Not Applicable
• Number and type of components placed on delay of repair and explanation for delay [(b)(7)(xi)]	Not Applicable
• Type of instrument used to resurvey repaired components that could not be repaired during initial finding [(b)(7)(xii)]	Not Applicable

8. Pneumatic Pump

[40 CFR 60.5420a(b)(8)]

Requirement	Response
	Not Applicable. No applicable pneumatic pumps are located at this site.

9. Closed Vent System Certification

[40 CFR 60.5420a(b)(12)]

Requirement	Response
	Not Applicable. No closed vent systems are located at this site.

Attachment 1

Certification Statement

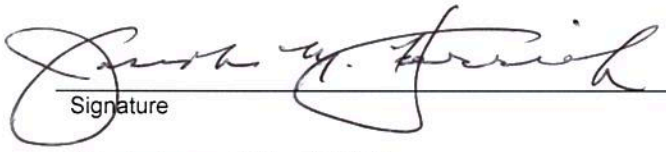
40 CFR SUBPART OOOOa ANNUAL REPORT
CERTIFICATION STATEMENT

40 CFR 60.5420a(b)(1)(iv)

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Joseph M. Harrick
Printed Name

General Manager, Environmental Health and Safety
Title


Signature

October 25, 2018
Date

Attachment 2

Well Completion Operation Records

Headwaters 143 Completion Operations

143-4HU

API Well Number: 37-105-21860-00-00
County and State: Potter County, PA
Municipality: Ulysses Township
Reporting Period: August 1, 2017 - August 7, 2017

Duration of Flowback (total number of hours):	140.75
Duration of Recovery to the Flow Line (total number of hours):	134.25
Duration of Combustion (total number of hours):	0
Duration of Venting (total number of hours):	0
Specific Reason for Venting (total number of hours):	N/A

143-5HU

API Well Number: 37-105-21861-00-00
County and State: Potter County, PA
Municipality: Ulysses Township
Reporting Period: August 7, 2017 - August 15, 2017

Duration of Flowback (total number of hours):	189.50
Duration of Recovery to the Flow Line (total number of hours):	187.00
Duration of Combustion (total number of hours):	0
Duration of Venting (total number of hours):	0
Specific Reason for Venting (total number of hours):	N/A

Attachment 3

Well Completion Operations Log

Headwaters 143-4HU Completion Operations

Well Location:	41.842512, -77.740401
US Well Number:	37-105-21860-00-00
Date and Time of Flowback Onset:	August 1, 2017; 12:00 pm
Date and Time of Each Attempt to Direct Flowback to a Separator:	August 1, 2017; 6:30 pm
Date and Time Well was Shut in and Flowback Equipment Permanently Disconnected OR Date and Time of Startup of Production:	August 7, 2017; 8:45 am
Duration of Flowback (hr):	140.75
Duration of Recovery (hr) [2]:	134.25
Type of Recovery [3]:	Routed to the gas flow line
Description of Why All the Types of Recovery Are Technically Infeasible [4]:	NA
If Recovery is Technically Infeasible and Exception [5] from Combustion Claimed:	NA
Exception Claimed:	NA
Start Date:	NA
End Date:	NA
Reason for exception:	NA
Duration of Combustion (hr):	0
Duration of Venting (hr):	0
Reason for Venting in Lieu of Capture or Combustion:	NA
Separator Located Onsite During Entire Flowback Period:	Yes

[1] Initial Flowback is the period which begins at the onset of flowback and ends when it is technically feasible for a separator to function.

[2] Not required for wildcat well, delineation well, non-wildcat low pressure well, or non-delineation low pressure well.

[3] Types of recovery:
- Routed to the gas flow line or collection system,
- Re-injected into the well or another well,
- Used as an onsite fuel source, or
- Used for another useful purpose that a purchased fuel or raw material would serve.

[4] Examples of information to be included in description of recovery being technically infeasible:
- Name and location of the nearest gathering line and technical considerations preventing routing to this line,
- Capture, re-injection, and reuse technologies considered and aspects of gas or equipment preventing use as a fuel onsite, and
- Technical considerations preventing use of recovered gas for other useful purpose that a purchased fuel or raw material would serve.

[5] Types of exceptions:
- Conditions that may result in a fire hazard or explosion, or
- Where high heat emissions may negatively impact tundra, permafrost, or waterways.

Headwaters 143-5HU Completion Operations

Well Location:	41.842470, -77.740307
US Well Number:	37-105-21861-00-00
Date and Time of Flowback Onset:	August 7, 2017; 11:00 am
Date and Time of Each Attempt to Direct Flowback to a Separator:	August 7, 2017; 1:30 pm
Date and Time Well was Shut in and Flowback Equipment Permanently Disconnected OR Date and Time of Startup of Production:	August 15, 2017; 8:30 am
Duration of Flowback (hr):	189.50
Duration of Recovery (hr) [2]:	187.00
Type of Recovery [3]:	Routed to the gas flow line
Description of Why All the Types of Recovery Are Technically Infeasible [4]:	NA
If Recovery is Technically Infeasible and Exception [5] from Combustion Claimed:	NA
Exception Claimed:	NA
Start Date:	NA
End Date:	NA
Reason for exception:	NA
Duration of Combustion (hr):	0
Duration of Venting (hr):	0
Reason for Venting in Lieu of Capture or Combustion:	NA
Separator Located Onsite During Entire Flowback Period:	Yes

[1] Initial Flowback is the period which begins at the onset of flowback and ends when it is technically feasible for a separator to function.

[2] Not required for wildcat well, delineation well, non-wildcat low pressure well, or non-delineation low pressure well.

[3] Types of recovery:
- Routed to the gas flow line or collection system,
- Re-injected into the well or another well,
- Used as an onsite fuel source, or
- Used for another useful purpose that a purchased fuel or raw material would serve.

[4] Examples of information to be included in description of recovery being technically infeasible:
- Name and location of the nearest gathering line and technical considerations preventing routing to this line,
- Capture, re-injection, and reuse technologies considered and aspects of gas or equipment preventing use as a fuel onsite, and
- Technical considerations preventing use of recovered gas for other useful purpose that a purchased fuel or raw material would serve.

[5] Types of exceptions:
- Conditions that may result in a fire hazard or explosion, or
- Where high heat emissions may negatively impact tundra, permafrost, or waterways.